

## CLAIMS

1. A medical imaging system comprising:  
an imaging device;  
a patient positioning area in close proximity to said imaging device, said imaging device being configured to move within said patient positioning area; and  
a protective bumper attached to said imaging device, said protective bumper conforming to a shape of a portion of said imaging device.
2. The medical imaging system of claim 1, wherein said protective bumper is an L-shaped cushioned bumper.
3. The medical imaging system of claim 2, wherein said protective bumper is fluid filled.
4. The medical imaging system of claim 1, wherein said imaging device comprises an x-ray source and an x-ray detector.
5. The medical imaging system of claim 1, wherein said medical imaging system is at least one of a CT, ultrasound, fluoroscopy, PET, and nuclear imaging system.
6. The medical imaging system of claim 1, wherein said imaging device is positioned on a C-arm and is configured to rotate around a patient positioned in said patient positioning area.
7. The medical imaging system of claim 1, wherein said imaging device includes a main body having a distal end having a lower surface, said protective bumper further comprising a first lip adjacent to said main body and a second lip extending

laterally across said lower surface, wherein said first and second lips define a unitary structure.

8. The medical imaging system of claim 3, further comprising a detection system in contact with said fluid, said detection system comprising a pressure sensing device.

9. The medical imaging system of claim 8 further comprising a housing mounted on said imaging device, said detection system being contained in said housing.

10. The medical imaging system of claim 8 wherein said detection system comprises a plurality of pressure sensing devices in contact with said fluid.

11. The medical imaging system of claim 8 wherein said detection system is electrically connected to a processing unit.

12. A medical imaging device comprising:  
a main body extending from a support structure, said main body having a distal end, a lower surface and a lateral surface;  
an L-shaped cushioned bumper having a lower member integrally formed with an upper member, said L-shaped cushioned bumper being attached to a portion of said distal end of said main body, said L-shaped cushioned bumper conforming to a shape of said distal end of said main body, and said lower member extending over said lower surface of said distal end, and said upper member extending over a lateral surface of said distal end.

13. The medical imaging device of claim 12, wherein said imaging device comprises an x-ray detector.

14. The medical imaging device of claim 12, wherein said imaging device is positioned on a C-arm and is configured to rotate around a patient positioning area.

15. The medical imaging device of claim 12, wherein said L-shaped cushioned bumper is fluid filled, further comprising a detection system in contact with said fluid, said detection system comprising a pressure sensing device.

16. The medical imaging device of claim 15 wherein said detection system comprises a plurality of pressure sensing devices in contact with said fluid.

17. The medical imaging device of claim 12, further comprising:  
a mounting frame located at said distal end of said main body, said mounting frame having an upper base and a lower base;  
a first flange, attached to said upper base, wherein at least a portion of said upper member is attached to said first flange; and  
a second flange, attached to said lower base, wherein at least a portion of said lower member is attached to said second flange.

18. A medical imaging device having a main body extending from a support structure, comprising:  
a first cushioned bumper positioned around at least a portion of a lateral surface of said main body; and  
a second cushioned bumper positioned over at least a portion of a lower surface of said main body.

19. The medical imaging device of claim 18, further comprising:  
a third cushioned bumper positioned between said first cushioned bumper and said second cushioned bumper.

20. The medical imaging device of claim 19, wherein said first and second cushioned bumpers are fluid filled, further comprising:

a housing, mounted on said imaging device;

a detection system contained within said housing, said detection system comprising a pressure sensing device in contact with said fluid.